

NSQIP unruptured aneurysm scale



Data on patients who underwent surgical clipping of an unruptured aneurysm were extracted from the prospective National Surgical Quality Improvement Program registry (NSQIP; 2007-2014); NSQIP does not systematically collect data on patients undergoing intracranial endovascular intervention.

Multivariable logistic regression evaluated predictors of any 30-day adverse event; variables screened included patient demographics, comorbidities, functional status, preoperative laboratory values, aneurysm location/complexity, and operative time. A predictive scale was constructed based on statistically significant independent predictors, which was validated using both NSQIP (2015-2016) and the Nationwide Inpatient Sample (NIS; 2002-2011).

The NSQIP unruptured aneurysm scale was proposed: 1 point was assigned for a bleeding disorder; 2 points for age 51-60 years, cardiac disease, diabetes mellitus, morbid obesity, anemia (hematocrit < 36%), operative time 240-330 minutes; 3 points for leukocytosis (white blood cell count > 12,000/ μ L) and operative time > 330 minutes; and 4 points for age > 60 years. An increased score was predictive of postoperative stroke or coma (NSQIP: $p = 0.002$, C-statistic = 0.70; NIS: $p < 0.001$, C-statistic = 0.61), a medical complication (NSQIP: $p = 0.01$, C-statistic = 0.71; NIS: $p < 0.001$, C-statistic = 0.64), and a nonroutine discharge (NSQIP: $p < 0.001$, C-statistic = 0.75; NIS: $p < 0.001$, C-statistic = 0.66) in both validation populations. Greater score was also predictive of increased odds of any adverse event, a major complication, and an extended hospitalization in both validation populations ($p \leq 0.03$).

The NSQIP unruptured aneurysm scale may augment the risk stratification of patients undergoing microsurgical clipping of unruptured cerebral aneurysms ¹⁾.

¹⁾

Dasenbrock HH, Rudy RF, Smith TR, Gormley WB, Patel NJ, Frerichs KU, Aziz-Sultan MA, Du R. Adverse events after clipping of unruptured intracranial aneurysms: the NSQIP unruptured aneurysm scale. J Neurosurg. 2019 Mar 15:1-10. doi: 10.3171/2018.12.JNS182873. [Epub ahead of print] PubMed PMID: 30875693.

From:
<https://neurosurgerywiki.com/wiki/> - Neurosurgery Wiki

Permanent link:
https://neurosurgerywiki.com/wiki/doku.php?id=nsqip_unruptured_aneurysm_scale

Last update: 2024/06/07 02:57

